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EXAMINER

MOORE, IAN N

ART UNIT

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2616

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|-------------------------------------|--|
| Office Action Summary | Application No. 10/675,565 | Applicant(s) VARMA ET AL. | |
| | Examiner Ian N. Moore | Art Unit 2616 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 45,47-50,52-55 and 57-59 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 45,47-50,52-55 and 57-59 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>4-9-04;7-31-06;10-24-06</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to because there is a lack of descriptive **text** legends for FIG. 1 and 2 (*for example, in FIG. 1, "120" should be labeled as "BSC 120", and "130" should be labeled as "CPE 130", etc., in FIG. 2, "250" should be labeled as "Frame Describer Packet 250", etc.*) [See 37 CFR 1.83, CFR 1.84 [5(O)], MPEP § 608.02(e)].
2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the **"an antenna", "a processor", "data memory" in line 3-5 of claim 50** must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action.

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The objection to the drawings will not be held in abeyance.

Specification

3. The abstract of the disclosure is objected to because it contains the phrase, “**invention**” in line 1, which can be implied. It is suggested to remove the implied phrase “the invention provides”. Correction is required. See MPEP § 608.01(b).

4. The disclosure is objected to because of the following:

- The status of a parent reference U.S. application **09/475,642** recited in page 1, line 19-20 is missing. It is suggested to update the status as “**now issued as U.S. Patent 6,650,623**”.
- In the specification, page 5, lines 4-13 recite, “related application section...U.S. patent application serial **no.** _____, filed the same day in the same name of the inventors, attorney docket number 164.1003.03...” It is suggested to submit U.S. application serial number with current status of the application.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 45,47,50,52,55 and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Raissinia (US006430193B1) in view of Malmgren (US006807154B1).

Regarding Claim 45, Raissinia discloses a method of adaptation in point to multipoint communication (see FIG. 1-2, a point to multipoint network processing the methods/steps; see col. 3, line 64 to col. 4, line 7), the method including steps of:

determining, by a base station (see FIG. 1-3, head End or central access point 102), physical and media access control parameters to be used by each of plural customer premises equipment (see FIG. 1, subscribers 104; see col. 4, line 55-64; see col. 5, line 1-45; determining/defining physical and MAC layer control information/data (e.g. power adjustment) for one or more subscriber units);

packaging said physical and media access control parameters (see FIG. 3, a combined system of codeword formation 312 and encoding 314,316 encodes/formed/packetizes physical and MAC layer control information/data) in descriptor packets (see FIG. 5A-C, in downstream broadcast/unicast packets/code words; see col. 9, line 16-56) having a fixed size (see col. 4, line 30-40; see col. 5, line 6-35; see col. 6, line 31-40,55-66; dividing each physical and MAC control information/data into a fixed/predefined/predetermined segments known as codewords, and each segmented codeword has a fixed/predefined/predetermined length/size/bytes); and

pre-announcing said physical and media access control parameters to said customer premises equipment by sending said descriptor packets from said base station to said customer premises equipment (see FIG. 1,3, transmitter system 318 broadcasts/transmits downstream packets/codewords with physical and MAC control information (i.e. power adjustment or preambles) to subscriber/subscribers 104 from central access point 102; see col. 5, line 30-45; see col. 6, line 6-11,24-35,55-60; see col. 8, line 38-45), with each descriptor packet sent as a first packet in a time division multiple access frame (see col. 4, line 25-40; see col. 5, line 30-35;

see col. 6, line 45-65; each downstream packet/codeword is a broadcast/SYNC packet which is a first packet, transmitted in the first time slot, in the time division multiple access (TDMA) frame; also see FIG. 5A-C, broadcast codewords (e.g. power control) of FIG. 5A, 5C are transmitted in first packet/data 504, at the beginning/first packet/data in the TDMA frame; see col. 9, line 16-55);

determining, by said base station (see FIG. 1-3, head End or central access point 102), physical and media access control parameters to be used by each of plural customer premises equipment (see FIG. 1, subscribers 104; see col. 4, line 55-64; see col. 5, line 1-45; determining/defining physical and MAC layer control information/data (i.e. power adjustment) for one or more subscriber units);

packaging said physical and media access control parameters (see FIG. 3, a combined system of codeword formation 312 and encoding 314,316 encodes/formed/packetizes physical and MAC layer control information/data) in descriptor packets (see FIG. 5A-C, in downstream broadcast/unicast packets/code words; see col. 9, line 16-56) having a fixed size (see col. 4, line 30-40; see col. 5, line 6-35; see col. 6, line 31-40,55-66; dividing each physical and MAC control information/data into a fixed/predefined/predetermined segments known as codewords, and each segmented codeword has a fixed/predefined/predetermined length/size/bytes); and

pre-announcing said physical and media access control parameters to said customer premises equipment by sending said descriptor packets from said base station to said customer premises equipment (see FIG. 1,3, transmitter system 318 broadcasts/transmits downstream packets/codewords with physical and MAC control information (i.e. power adjustment or preambles) to subscriber/subscribers 104 from central access point 102; see col. 5, line 30-45;

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see col. 6, line 6-11, 24-35, 55-60; see col. 8, line 38-45), with each descriptor packet sent as a first packet in a time division multiple access frame (see col. 4, line 25-40; see col. 5, line 30-35; see col. 6, line 45-65; each downstream packet/codeword is a broadcast/SYNC packet which is a first packet, transmitted in the first time slot, in the TDMA frame; also see FIG. 5A-C, broadcast codewords (e.g. power control) of FIG. 5A, 5C are transmitted in first packet/data 504, at the beginning/first packet/data in the TDMA frame; see col. 9, line 16-55).

In general Raissinia discloses all steps of “determining...”, “packaging...”, “pre-announcing...in a TDMA frame”, determining...”, “packaging...”, and “pre-announcing...in a TDMA frame” as set forth above.

Raissinia does not explicitly disclose **new**.

However, it is well known in the art of mobile communication that TDMA frame is send more than one time in the mobile communication, and the parameters embedded within a new/updated/another TDMA frame is “new/updated/another” parameter. Thus, Raissinia’s steps/functions of “determining...”, “packaging...”, and “pre-announcing...in a TDMA frame” can be repeated for another/new/update TDMA frame with new/updated/another parameter.

In particular, Malmgren teaches updating and broadcasting new parameters with descriptor packet as a first packet in TDMA frame (see FIG. 2, see col. 4, line 9-15, 30-67; see col. 5, line 55 to col. 6, line 10; abstract; dynamically updating new/updated/another with Broadcast Control Channel (BCCH) as a first data/packet in TDMA frame (see FIG. 2-3); note that updating occurs at second/new transmission after first transmission).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide performing the same steps with a new/updated/another

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parameter, by Malmgren in the system of Raissinia, so that it would provide additional/new physical layer control information such as scheduling information and/or frequency control information to the subscribers; see Raissinia see col. 5, line 29-35; and it would also provide a spectrum efficient radio link adaptation by using BCCH to adapt the radio cell to prevailing radio condition, Malmgren col. 3, line 30-40.

Regarding Claim 47, Raissinia discloses wherein said physical and media access control parameters are in a first layer of an OSI model communication system (see col. 4, line 30-40; physical and MAC layers control information are in the first layer (i.e. physical connection- layer 1) of OSI multilayer model).

Regarding Claim 50, Raissinia discloses a base station (see FIG. 1-3, head End or central access point 102) for use with point to multipoint communication (see FIG. 1, point to multipoint wireless network (i.e. from Head end 102 to subscribers 104); see col. 3, line 64 to col. 4, line 7), comprising:

at least one antenna (see FIG. 2, antenna that couples to upstream 306 and downstream physical layer 308; see col. 5, line 46-57);

a processor (see FIG. 2, CPU 302; see col. 5, line 46-57);

program and data memory (see FIG. 2, a memory must be present to stores the programs/instructions/methods for CPU 302 to process; see col. 5, line 46-57); and

communication elements that send and receive information over said communication link using said antenna under control of said processor (see FIG. 3, Upstream block 306 and downstream block 308 receives/sends data signals over the radio link using antenna according to CPU 302 since CPU 302 coordinates overall operation of headed 102; see col. 5, line 46-57);

wherein said processor operates under control of instructions stored in said memory (see FIG. 2, CPU 302 coordinates overall operating of headed 102 according to the methods/instructions stored in the memory; see col. 5, line 46-57), said instructions including steps of:

determining physical and media access control parameters to be used by each of plural customer premises equipment (see FIG. 1, subscribers 104; see col. 4, line 55-64; see col. 5, line 1-45; determining/defining physical and MAC layer control information/data for one or more subscriber units);

packaging said physical and media access control parameters (see FIG. 3, a combined system of codeword formation 312 and encoding 314,316 encodes/formed/packetizes physical and MAC layer control information/data) in descriptor packets (see FIG. 5A-C, in downstream broadcast/unicast packets/code words; see col. 9, line 16-56) having a fixed size (see col. 4, line 30-40; see col. 5, line 6-35; see col. 6, line 31-40,55-66; dividing each physical and MAC control information/data into a fixed/predefined/predetermined segments known as codewords, and each segmented codeword has a fixed/predefined/predetermined length/size/bytes); and

pre-announcing said physical and media access control parameters to said customer premises equipment by sending said descriptor packets from said base station to said customer premises equipment (see FIG. 1,3, transmitter system 318 broadcasts/transmits downstream packets/codewords with physical and MAC control information (i.e. power adjustment) to subscriber/subscribers 104 from central access point 102; see col. 5, line 30-45; see col. 6, line 6-11,24-35,55-60; see col. 8, line 38-45), with each descriptor packet sent as a first packet in a time division multiple access frame (see col. 4, line 25-40; see col. 5, line 30-35; see col. 6, line 45-

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65; each downstream packet/codeword is a broadcast/SYNC packet which is a first packet, transmitted in the first time slot, in the TDMA frame; also see FIG. 5A-C, broadcast codewords (e.g. power control) of FIG. 5A, 5C are transmitted in first packet/data 504, at the beginning/first packet/data in the TDMA frame; see col. 9, line 16-55);

determining, by said base station (see FIG. 1-3, head End or central access point 102), physical and media access control parameters to be used by each of plural customer premises equipment (see FIG. 1, subscribers 104; see col. 4, line 55-64; see col. 5, line 1-45; determining/defining physical and MAC layer control information/data (i.e. power adjustment) for one or more subscriber units);

packaging said physical and media access control parameters (see FIG. 3, a combined system of codeword formation 312 and encoding 314,316 encodes/formed/packetizes physical and MAC layer control information/data) in descriptor packets (see FIG. 5A-C, in downstream broadcast/unicast packets/code words; see col. 9, line 16-56) having a fixed size (see col. 4, line 30-40; see col. 5, line 6-35; see col. 6, line 31-40,55-66; dividing each physical and MAC control information/data into a fixed/predefined/predetermined segments known as codewords, and each segmented codeword has a fixed/predefined/predetermined length/size/bytes); and

pre-announcing said physical and media access control parameters to said customer premises equipment by sending said descriptor packets from said base station to said customer premises equipment (see FIG. 1,3, transmitter system 318 broadcasts/transmits downstream packets/codewords with physical and MAC control information (i.e. power adjustment or preambles) to subscriber/subscribers 104 from central access point 102; see col. 5, line 30-45; see col. 6, line 6-11,24-35,55-60; see col. 8, line 38-45), with each descriptor packet sent as a

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first packet in a time division multiple access frame (see col. 4, line 25-40; see col. 5, line 30-35; see col. 6, line 45-65; each downstream packet/codeword is a broadcast/SYNC packet which is a first packet, transmitted in the first time slot, in the TDMA frame; also see FIG. 5A-C, broadcast codewords (e.g. power control) of FIG. 5A, 5C are transmitted in first packet/data 504, at the beginning/first packet/data in the TDMA frame; see col. 9, line 16-55).

In general Raissinia discloses all steps of “determining...”, “packaging...”, “pre-announcing...in a TDMA frame”, determining...”, “packaging...”, and “pre-announcing...in a TDMA frame” as set forth above.

Raissinia does not explicitly disclose **new**.

However, it is well known in the art of mobile communication that TDMA frame is send more than one time in the mobile communication, and the parameters embedded within a new/updated/another TDMA frame is “new/updated/another” parameter. Thus, Raissinia’s steps/functions of “determining...”, “packaging...”, and “pre-announcing...in a TDMA frame” can be repeated for another/new/update TDMA frame with new/updated/another parameter.

In particular, Malmgren teaches updating and broadcasting new parameters in a TDMA frame (see FIG. 2, see col. 4, line 9-15, 30-67; see col. 5, line 55 to col. 6, line 10; abstract; dynamically updating new/updated/another with Broadcast Control Channel (BCCH) as a first data/packet in TDMA frame (see FIG. 2-3); note that updating occurs at second/new transmission after first transmission).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide performing the same steps with a new/updated/another parameter, by Malmgren in the system of Raissinia, so that it would provide additional/new

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physical layer control information such as scheduling information and/or frequency control information to the subscribers; see Raissinia see col. 5, line 29-35; and it would also provide a spectrum efficient radio link adaptation by using BCCH to adapt the radio cell to prevailing radio condition, Malmgren col. 3, line 30-40.

Regarding Claim 52, Raissinia discloses wherein said physical and media access control parameters are in a first layer of an OSI model communication system (see col. 4, line 30-40; physical and MAC layers control information are in the first layer (i.e. physical connection- layer 1) of OSI multilayer model).

Regarding Claim 55, Raissinia discloses a memory storing information including instructions (see FIG. 2, a memory must be present to stores the programs/instructions/methods for CPU 302 to process; see col. 5, line 46-57), the instructions executable by a processor (see FIG. 2, CPU 302; see col. 5, line 46-57) to control a base station (see FIG. 1-3, head End or central access point 102) for use with point to multipoint communication (see FIG. 1, point to multipoint wireless network (i.e. from Head end 102 to subscribers 104); see col. 3, line 64 to col. 4, line 7), the instructions including steps of:

determining, by a base station (see FIG. 1-3, head End or central access point 102), physical and media access control parameters to be used by each of plural customer premises equipment (see FIG. 1, subscribers 104; see col. 4, line 55-64; see col. 5, line 1-45; determining/defining physical and MAC layer control information/data (e.g. power adjustment) for one or more subscriber units);

packaging said physical and media access control parameters (see FIG. 3, a combined system of codeword formation 312 and encoding 314,316 encodes/formed/packetizes physical

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and MAC layer control information/data) in descriptor packets (see FIG. 5A-C, in downstream broadcast/unicast packets/code words; see col. 9, line 16-56) having a fixed size (see col. 4, line 30-40; see col. 5, line 6-35; see col. 6, line 31-40,55-66; dividing each physical and MAC control information/data into a fixed/predefined/predetermined segments known as codewords, and each segmented codeword has a fixed/predefined/predetermined length/size/bytes); and

pre-announcing said physical and media access control parameters to said customer premises equipment by sending said descriptor packets from said base station to said customer premises equipment (see FIG. 1,3, transmitter system 318 broadcasts/transmits downstream packets/codewords with physical and MAC control information (i.e. power adjustment) to subscriber/subscribers 104 from central access point 102; see col. 5, line 30-45; see col. 6, line 6-11,24-35,55-60; see col. 8, line 38-45), with each descriptor packet sent as a first packet in a time division multiple access frame (see col. 4, line 25-40; see col. 5, line 30-35; see col. 6, line 45-65; each downstream packet/codeword is a broadcast/SYNC packet which is a first packet, transmitted in the first time slot, in the TDMA frame; also see FIG. 5A-C, broadcast codewords (e.g. power control) of FIG. 5A, 5C are transmitted in first packet/data 504, at the beginning/first packet/data in the TDMA frame; see col. 9, line 16-55);

determining, by said base station (see FIG. 1-3, head End or central access point 102), physical and media access control parameters to be used by each of plural customer premises equipment (see FIG. 1, subscribers 104; see col. 4, line 55-64; see col. 5, line 1-45; determining/defining physical and MAC layer control information/data (e.g. power adjustment) for one or more subscriber units);

packaging said physical and media access control parameters (see FIG. 3, a combined system of codeword formation 312 and encoding 314,316 encodes/formed/packetizes physical and MAC layer control information/data) in descriptor packets (see FIG. 5A-C, in downstream broadcast/unicast packets/code words; see col. 9, line 16-56) having a fixed size (see col. 4, line 30-40; see col. 5, line 6-35; see col. 6, line 31-40,55-66; dividing each physical and MAC control information/data into a fixed/predefined/predetermined segments known as codewords, and each segmented codeword has a fixed/predefined/predetermined length/size/bytes); and

pre-announcing said physical and media access control parameters to said customer premises equipment by sending said descriptor packets from said base station to said customer premises equipment (see FIG. 1,3, transmitter system 318 broadcasts/transmits downstream packets/codewords with physical and MAC control information (i.e. power adjustment) to subscriber/subscribers 104 from central access point 102; see col. 5, line 30-45; see col. 6, line 6-11,24-35,55-60; see col. 8, line 38-45), with each descriptor packet sent as a first packet in a time division multiple access frame (see col. 4, line 25-40; see col. 5, line 30-35; see col. 6, line 45-65; each downstream packet/codeword is a broadcast/SYNC packet which is a first packet, transmitted in the first time slot, in the TDMA frame; also see FIG. 5A-C, broadcast codewords (e.g. power control) of FIG. 5A, 5C are transmitted in first packet/data 504, at the beginning/first packet/data in the TDMA frame; see col. 9, line 16-55).

In general Raissinia discloses all steps of “determining...”, “packaging...”, “pre-announcing...in a TDMA frame”, determining...”, “packaging...”, and “pre-announcing...in a TDMA frame” as set forth above.

Raissinia does not explicitly disclose **new**.

However, it is well known in the art of mobile communication that TDMA frame is send more than one time in the mobile communication, and the parameters embedded within a new/updated/another TDMA frame is “new/updated/another” parameter. Thus, Raissinia’s steps/functions of “determining...”, “packaging...”, and “pre-announcing...in a TDMA frame” can be repeated for another/new/update TDMA frame with new/updated/another parameter.

In particular, Malmgren teaches updating and broadcasting new parameters in a TDMA frame (see FIG. 2, see col. 4, line 9-15, 30-67; see col. 5, line 55 to col. 6, line 10; abstract; dynamically updating new/updated/another with Broadcast Control Channel (BCCH) as a first data/packet in TDMA frame (see FIG. 2-3); note that updating occurs at second/new transmission after first transmission).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide performing the same steps with a new/updated/another parameter, by Malmgren in the system of Raissinia, so that it would provide additional/new physical layer control information such as scheduling information and/or frequency control information to the subscribers; see Raissinia see col. 5, line 29-35; and it would also provide a spectrum efficient radio link adaptation by using BCCH to adapt the radio cell to prevailing radio condition, Malmgren col. 3, line 30-40.

Regarding Claim 57, Raissinia discloses wherein said physical and media access control parameters are in a first layer of an OSI model communication system (see col. 4, line 30-40; physical and MAC layers control information are in the first layer (i.e. physical connection- layer 1) of OSI multilayer model).

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7. Claims 48,49,53,54,58 and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Raissinia in view of Malmgren, and further in view of Newton Telecom Dictionary (hereinafter refers as Newton).

Regarding Claim 48, Raissinia discloses wherein said step of determining said physical and media access control parameters is responsive to a higher level layer (see col. 4, line 30-40; col. 5, line 1-4, 46-56; see col. 6, line 30-36, 44-50; see col. 7, line 12-16, 55-60; col. 9, line 16-25; determining/defining physical and MAC layer control information/data (i.e. power adjustment) is reacting/in-response-to/receptive to the higher layer). Raissinia also discloses layers in access point and subscriber units correspond to layers of OSI multi-layer model of communication (see col. 4, line 25-35). Malmgren discloses the “new” physical and media access control parameters as set forth above in claim 45.

Neither Raissinia nor Malmgren explicitly discloses higher level layer in said OSI model communication system.

However, it is well known in the art that OSI model contains higher level layers as established by International Standards Organization (ISO) standard. In particular, Newton discloses higher level layer in said OSI model communication system (see OSI Model and OSI standards, page 497-498; higher layers 3-7).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide higher level layers of OSI, as taught by Newton, in the combined system of Raissinia and Malmgren, so that it would provide a network design framework to allow equipment from different vendors to be able to communicate; see Newton OSI standard, page 498.

Regarding Claim 49, Raissinia discloses higher level layer as set forth above in claim 48. Further, Raissinia discloses wherein said first layer includes a physical layer (see col. 4, line 30-40; the lowest/first layer in OSI standard model is a physical layer).

Neither Raissinia nor Malmgren explicitly discloses at least one of: a media access layer, a network layer, a transport layer, an application layer.

However, it is well known in the art that OSI model contains a media access layer, a network layer, a transport layer, and application layer as established by International Standards Organization (ISO) standard. In particular, Newton discloses said higher OSI level layer includes at least one of OSI standard layer one of a data link layer 2 (i.e. media access layer), a network layer 3, and an application layer 7; see OSI model page 497).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide OSI media access layer, a network layer, a transport layer, or an application layer, as taught by Newton, in the combined system of Raissinia and Malmgren, so that it would provide a network design framework to allow equipment from different vendors to be able to communicate; see Newton OSI standard, page 498.

Regarding Claim 53, Raissinia discloses wherein said step of determining said physical and media access control parameters is responsive to a higher level layer (see col. 4, line 30-40; col. 5, line 1-4, 46-56; see col. 6, line 30-36, 44-50; see col. 7, line 12-16, 55-60; col. 9, line 16-25; determining/defining physical and MAC layer control information/data (i.e. power adjustment) is reacting/in-response-to/receptive to the higher layer). Raissinia also discloses layers in access point and subscriber units correspond to layers of OSI multi-layer model of

communication (see col. 4, line 25-35). Malmgren discloses the “new” physical and media access control parameters as set forth above in claim 50.

Neither Raissinia nor Malmgren explicitly discloses higher level layer in said OSI model communication system.

However, it is well known in the art that OSI model contains higher level layers as established by International Standards Organization (ISO) standard. In particular, Newton discloses higher level layer in said OSI model communication system (see OSI Model and OSI standards, page 497-498; higher layers 3-7).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide higher level layers of OSI, as taught by Newton, in the combined system of Raissinia and Malmgren, so that it would provide a network design framework to allow equipment from different vendors to be able to communicate; see Newton OSI standard, page 498.

Regarding Claim 54, Raissinia discloses higher level layer as set forth above in claim 48. Further, Raissinia discloses wherein said first layer includes a physical layer (see col. 4, line 30-40; the lowest/first layer in OSI standard model is a physical layer).

Neither Raissinia nor Malmgren explicitly discloses at least one of: a media access layer, a network layer, a transport layer, an application layer.

However, it is well known in the art that OSI model contains a media access layer, a network layer, a transport layer, and application layer as established by International Standards Organization (ISO) standard. In particular, Newton discloses said higher OSI level layer includes

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at least one of OSI standard layer one of a data link layer 2 (i.e. media access layer), a network layer 3, and an application layer 7; see OSI model page 497).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide OSI media access layer, a network layer, a transport layer, or an application layer, as taught by Newton, in the combined system of Raissinia and Malmgren, so that it would provide a network design framework to allow equipment from different vendors to be able to communicate; see Newton OSI standard, page 498.

Regarding Claim 58, Raissinia discloses wherein said step of determining said physical and media access control parameters is responsive to a higher level layer (see col. 4, line 30-40; col. 5, line 1-4, 46-56; see col. 6, line 30-36, 44-50; see col. 7, line 12-16, 55-60; col. 9, line 16-25; determining/defining physical and MAC layer control information/data (i.e. power adjustment) is reacting/in-response-to/receptive to the higher layer). Raissinia also discloses layers in access point and subscriber units correspond to layers of OSI multi-layer model of communication (see col. 4, line 25-35). Malmgren discloses the “new” physical and media access control parameters as set forth above in claim 55.

Neither Raissinia nor Malmgren explicitly discloses higher level layer in said OSI model communication system.

However, it is well known in the art that OSI model contains higher level layers as established by International Standards Organization (ISO) standard. In particular, Newton discloses higher level layer in said OSI model communication system (see OSI Model and OSI standards, page 497-498; higher layers 3-7).

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Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide higher level layers of OSI, as taught by Newton, in the combined system of Raissinia and Malmgren, so that it would provide a network design framework to allow equipment from different vendors to be able to communicate; see Newton OSI standard, page 498.

Regarding Claim 59, Raissinia discloses higher level layer as set forth above in claim 48. Further, Raissinia discloses wherein said first layer includes a physical layer (see col. 4, line 30-40; the lowest/first layer in OSI standard model is a physical layer).

Neither Raissinia nor Malmgren explicitly discloses at least one of: a media access layer, a network layer, a transport layer, an application layer.

However, it is well known in the art that OSI model contains a media access layer, a network layer, a transport layer, and application layer as established by International Standards Organization (ISO) standard. In particular, Newton discloses said higher OSI level layer includes at least one of OSI standard layer one of a data link layer 2 (i.e. media access layer), a network layer 3, and an application layer 7; see OSI model page 497).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide OSI media access layer, a network layer, a transport layer, or an application layer, as taught by Newton, in the combined system of Raissinia and Malmgren, so that it would provide a network design framework to allow equipment from different vendors to be able to communicate; see Newton OSI standard, page 498.

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Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- **Fischer** (US005371734A) discloses a hub station sends control information to remote stations in TDMA frames.
- **Black** (second generation mobile & wireless networks) discloses TDMA standards (i.e. IS-136 (North America) or GSM (Europe)) where broadcast packet (i.e. BCH or BCCH) is transmitted in the first time slot from the base station.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ian N. Moore whose telephone number is 571-272-3085. The examiner can normally be reached on 9:00 AM- 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on 571-272-7629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read "Ian N. Moore".

Ian N. Moore
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